

**3M ESPE**

K070956

MAY 22 2007

**510(k) SUMMARY OF SAFETY AND EFFECTIVENESS**

**Submitter**

|                                    |   |
|------------------------------------|---|
| Company:                           | 3M ESPE Dental Products                     |
| Street:                            | 3M Center                                   |
| ZIP-Code, City:                    | St. Paul, Mn 55144                          |
| Country:                           | USA   |
| Establishment Registration Number: | 2110898                                     |
| Official Correspondent:            | Karen O'Malley<br>Sr. Regulatory Specialist |
| Phone:                             | 651 736-7326                                |
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| E-mail:                            | kdomalley@mmm.com                           |
| Date:                              | March 09, 2007                              |

**Name of Device**

|                     |  |
|---------------------|--|
| Proprietary Name:   | SEA2   |
| Classification Name | Resin tooth bonding agent<br>21 C.F.R. §872.3200 as a Class II device. |
| Common Name:        | Dental Adhesive  |

**Predicate Devices**

| Device                 | 510(k)  |
|------------------------|---------|
| Adper Single Bond Plus | K962785 |
| Adper Prompt           | K060684 |
|                        | K040857 |
|                        | K020946 |
| Clearfil SE Bond       | K023842 |
|                        | K012442 |
|                        | K990040 |

**Description and Technology Equivalence**

SEA2 Self-etch adhesive is classified as Resin tooth bonding agent (21 C.F.R. §872.3200) because it is a device intended to be applied to the interior of a prepared cavity of a tooth to improve retention of restorative materials (compomer and composite restorative material). SEA2 is also indicated for intraoral repairs of composite resin, porcelain or metal using light-cured composite resin. SEA2 can be used to seal dentinal tubules of hypersensitive teeth and exposed root surfaces to treat dentinal hypersensitivity.

SEA2 Self-etch adhesive is a simple to use, two-bottle, self-etch bonding adhesive with bottle A containing the aqueous primer and bottle B containing the acidic adhesive. This delivery design is common to many of the predicate devices as noted in the submission. The primer contains a color indicator which indicates complete coverage of the preparation. The color disappears upon addition of the adhesive, indicating activation of the acid and insuring that a proper etch is taking place.

Substantial safety and comparative performance testing of SEA2 has been conducted. The chemical composition is similar to predicate self-etch adhesive devices. The data provided in this 510(k) submission shows that the composition is safe based on the biocompatibility assessment conducted based on ISO10993 and ISO 7405.

The performance testing includes adhesion to dentin and enamel. The test results provided in the submission confirm the performance as substantially equivalent to the predicate devices with common indications.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

MAY 22 2007

Ms. Karen O'Malley  
Sr. Regulatory Specialist  
3M ESPE Dental Products  
3M Center  
St. Paul, Minnesota 55144-1000

Re: K070956

Trade/Device Name: SEA2 Self Etch Adhesive  
Regulation Number: 21 CFR 872.3200  
Regulation Name: Resin Tooth Bonding Agent  
Regulatory Class: II  
Product Code: KLE  
Dated: March 30, 2007  
Received: April 05, 2007

Dear Ms. O'Malley:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Chiu S. Lin", is written over a circular stamp or seal.

Chiu S. Lin, PhD

Director

Division of Anesthesiology, General Hospital,

Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

## Indications for Use

510(k)Number:

K070956

Device Name: SEA2 Self Etch Adhesive

**Indications For Use:**

1. Bonding between dentin/enamel and composite filling materials
2. Bonding between dentin/enamel and compomer filling materials
3. Intraoral repair of porcelain, composite, and metal using light-cure composite resin.
4. Desensitization of hypersensitive teeth, root surface desensitization

Prescription Use ☒ X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF  
NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

*Ron M. Jay Sr. MSK*  
(Signature)  
Division of Anesthesiology, General Hospital,  
Device Control, Dental Devices  
510(k) Number: K070956

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